REMARKS

Claims 1-60 and 62-71 are pending in the application. Solely to advance prosecution and without prejudice or disclaimer Applicants herewith amend claims 5, 8, 11 and 14, support for which is found, *inter alia*, in the Sequence Listing. Solely to advance prosecution and without prejudice or disclaimer Applicants herewith amend claims 1-16 to recite "the" instead of "an". Support for the amendments is found, *inter alia*, in the Sequence Listing. No new matter is added. Entry of the Amendment is kindly requested.

I. Withdrawn Objections and Rejections

The Applicants kindly thank the Office for withdrawal of the 35 U.S.C. § 102(b), § 103(a) and 35 U.S.C. § 112 objections/rejections regarding alleged lack of antecedent basis and alleged indefiniteness, indicated at paragraphs 6-13, pages 2-3, of the Office Action dated April 17, 2008.

II. Claims 5, 8, 11 and 14 are Properly Dependant Upon Claim 2 Under 37 C.F.R. § 1.75(c)

The Office objects to claims 5, 8, 11 and 14 under 37 C.F.R. § 1.75(c), as allegedly being of improper dependent form based on grammatical construction. Office Action, paragraph 14, page 3.

Solely to advance prosecution and without prejudice or disclaimer, Applicants herewith amend claims 5, 8, 11 and 14. Applicants' amendment overcomes the objection.

Withdrawal of the objection under 37 C.F.R. § 1.75(c) is therefore kindly requested.

III. Claims 1-32, 59-60 and 62 Are Enabled Under 35 U.S.C. § 112

In paragraph 16, on page 4 of the Office Action dated April 17, 2008, the Office rejects claims 1-32, 59-60, 62 and now applied to claims 1-2 as presently amended under 35 U.S.C.

§ 112, first paragraph, alleging the specification does not reasonably provide enablement for all of the embodiments recited by the claims. The Office admits that the specification is enabling for an isolated antibodies and epitope-binding fragments thereof that specifically bind CD33 and comprise the heavy chain CDRs of SEQ ID Nos:1-3 and the light chain CDRs of SEQ ID Nos:4-6 or comprises the heavy chain variable region of SEQ ID NO:7 and/or the light chain variable region of SEQ ID NO:8 or comprising the heavy chain variable region of SEQ ID NO:9 and/or the light chain variable region of SEQ ID NO:10 as well as conjugates thereof and compositions comprising said isolated anti-CD33 antibodies or epitope-binding fragments thereof. Office Action, page 4.

Applicants disagree and traverse the rejection. Applicants herewith provide Holt et al., referred to in Applicants' Response dated August 20, 2007. Applicants herewith reiterate and incorporate by reference all of the arguments set forth in the August 20, 2007, Response regarding enablement of the Applicants' specification in light of the state of the art of antibody engineering. The scientific evidence previously discussed in great detail, more specifically, included Holt et al.; Aires da Silva, et al.; Tanaka et al.; Peterson et al.; Rajpal et al.; and Patti et al.

Applicants herewith reiterate the arguments set forth in the August 20, 2007, Response regarding the Office's reliance on Rudikoff et al., Paul and Colman, as cited by the examiner. The cited references are antiquated and do not adequately reflect the state of the art at filing and are technically misapplied by the Office.

The antibody art has evolved since 1982. In addition to the above mentioned references, Applicants direct the Examiner to Park et al., attached herewith, which discloses AHNP which "is comparable in potency to the full-legth monoclonal antibody and exhibits biochemical and

biological properties that are predictive of therapeutic use." Page 194, second column, sentences 1-7. The reference further states, "the general approach described here may be considered a paradigm for development of specific receptor-based therapies..." The general approach is referenced to date back to as early as 1996 (see reference 19, Zhang *et al.*). AHNP was found to inhibit cell proliferation and anchorage independent growth (Figure 2); enhance apoptosis (Figure 4); and inhibit *in vivo* tumor growth (Figure 5). In addition, Applicants kindly request consideration of US 6,926,893, which states, "another form of an antibody fragment is a peptide coding for a single [CDR] can be obtained by constructing genes encoding the CDR of an antibody of interest." Col. 9, lines 43-47. The Office admits that VH domain antibodies exist. Office Action, paragraph 16. The Office admits that Rajpal et al. disclose amino acid substitutions. Office Action, paragraph 16. At page 9 of the outstanding Office Action, the Office asserts, "based on the facts presented by Patti, the antibody binds the ClfA protein from *Staphylococcus aureus*." Applicants kindly request that the Office explicitly point to the "facts" in support of their position in order to complete the record for appeal.

The Office's position is inconsistent with the Board's decision in *Ex parte* ABAD, wherein the Board addressed, "[w]ould it have required undue experimentation to make and/or use the full scope of a nucleic acid that has at least 90% sequence identity to SEQ ID NO: 1?" The Board concluded that "[i]t would not have required undue experimentation to practice of the full scope of the claimed invention. We note that if claims with 90% sequence identity are enabled, *a fortiori*, the dependent claims with narrower 95% sequence identity are also enabled." Other than the fact that molecular biology is an unpredictable art, the remaining *Wands* factors favor Appellants, particularly "the amount of direction or guidance presented", "the state of the prior art" and "the relative skill of those in the art," *In re Wands*, 858 F.2d 731, 736 (Fed. Cir.

1988). See *Ex parte* ABAD; BPAI, Appeal 2007-4356. It is well settled that patent applicants are not required to disclose every species encompassed by their claims, even in an unpredictable art. *In re Angstadt*, 537 F.2d 498, 502-03, 190 USPQ 214, 218 (CCPA 1976).

The Office's assertions regarding the existence of a chance of a change in the specificity of Applicants' antibody as recited by the claims due to substitutions of individual CDR amino acids or combinations of CDR mutations that bind the same antigen, the deletion or insertion of amino acids in the variable regions or the CDRs as recited by the claims (i.e., 90% identity) renders Applicants' invention as recited by the claims unpatentable ignores the law. Assuming *arguendo* that a single claimed embodiment is inoperable (i.e., 90% identical species that alter specificity), the inoperability of a single embodiment does not warrant a finding that the specification fails to enable the claims under 35 U.S.C. § 112, first paragraph. In fact, the Court of Appeals for the Federal Circuit addressed this very issue of enablement when it stated that "[e]ven if some of the claimed combinations were inoperative, the claims are not necessarily invalid. 'It is not a function of the claims to specifically exclude...possible inoperative substances..." *Atlas Power Co. v. E.I. du Pont de Nemours & Co.*, 750 F.2d 169, 1576 (Fed. Cir. 1984).

At pages 9 and 10 of the outstanding Office Action, the Office asserts that the claim language "*an* amino acid sequence" is not enabled by the specification. Solely to advance prosecution and without prejudice or disclaimer Applicants herewith amend the claims and overcome the rejection.

Based on Applicants' teachings in the specification, the state of the art and evidence relevant thereto, withdrawal of the 35 U.S.C. § 112 lack of enablement rejection is kindly requested.

IV. Claims 1 and 2 are Proper

In paragraph 17, on page 11 of the Office Action, the Office objects to claims 1-2 for reciting "having an amino acid sequences," which the Office asserts is grammatically incorrect.

Solely to advance prosecution and without prejudice or disclaimer, Applicants herewith amend claims 1 and 2. Applicants amendment renders the objection moot.

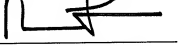
Withdrawal of the objection under 37 C.F.R. § 1.75(c) is therefore kindly requested.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The U.S. Patent and Trademark Office is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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